

ONLINE SUPPLEMENTARY DATA

Supplementary Table 1. Treatment characteristics for each site and for all patients.

Treatment intensification at baseline	Site 1 (n=22)	Site 2 (n=11)	Site 3 (n=14)	Site 4 (n=4)	Site 5 (n=10)	Site 6 (n=6)	Total (n=67)
Methotrexate initiation, n (%)	13 (59.1)	2 (18.2)	5 (35.7)	0 (0.0)	3 (30.0)	0 (0.0)	23 (34.3)
Methotrexate dose increased, n (%)	2 (9.1)	0 (0.0)	1 (7.1)	2 (50.0)	0 (0.0)	1 (16.7)	6 (9.0)
Sulphasalazine and Hydroxychloroquine initiation, n (%)	3 (13.6)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	3 (4.5)
Sulphasalazine initiation, n (%)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (16.7)	1 (1.5)
Hydroxychloroquine initiation, n (%)	0 (0.09)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Leflunomide initiation, n (%)	1 (4.5)	1 (9.1)	0 (0.0)	2 (50.0)	0 (0.0)	0 (0.0)	4 (6.0)
Biological disease-modifying anti-rheumatic drug initiation, n (%)	11 (50.0)	8 (72.7)	8 (57.1)	0 (0.0)	8 (80.0)	4 (66.7)	39 (58.2)
Prednisolone, n (%)	1 (13.6)	3 (27.3)	5 (35.7)	1 (25.0)	0 (0.0)	5 (83.3)	15 (22.4)
Total intramuscular injection of glucocorticoid, n (%)	4 (18.2)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	4 (6.0)
Total intratenosynovial injection of glucocorticoid, n (%)	7 (31.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	7 (10.5)
Total intraarticular injection of glucocorticoid, n (%)	20 (29.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (16.7)	21 (31.3)
Treatment intensification during study							
Addition of sulphasalazine and hydroxychloroquine (n)	1 (4.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.5)
Addition of leflunomide, n (%)	0 (0.0)	1 (9.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.5)
Addition hydroxychloroquine therapy, n (%)	0 (0.0)	1 (9.1)	0 (0.0)	1 (25.0)	0 (0.0)	1 (16.7)	3 (4.5)
Addition of biological disease-modifying anti-rheumatic drug therapy, n (%)	2 (9.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (10.0)	1 (16.7)	4 (6.0)

Data is shown as number (percentage).

Supplementary Table 2. Change in grey scale and Doppler tenosynovitis scores, and their standardized response mean, during 6 months follow-up, for each site and for all patients.

Site - Imaging modality		Baseline		Δ 0-3 month		p	SRM	Δ 3-6 month		p	SRM	Δ 0-6 month		p	SRM
Site 1 - Grey scale (n=22)	Median [25p;75p]	6	[2;8]	-2	[-5;0]	<0.01	0.9	-1.0	[-2;0]	<0.01	0.8	-4	[-7;-2]	<0.01	1.1
	Mean ±SD	6.3	±4.3	-3.4	±3.8			-1.4	±1.8			-4.8	±4.3		
Site 1 - Doppler	Median [25p;75p]	6	[3;9]	-3.5	[-9;-2]	<0.01	0.7	0	[-2;0]	0.09	0.4	-4	[-2;-9]	<0.01	0.7
	Mean ±SD	6.4	±5.2	-4.8	±5.3			-1.0	±2.4			-5.8	±5.4		
Site 2 - Grey scale (n=11)	Median [25p;75p]	6	[5;9]	-1	[-3;1]	0.3	0.3	-3	[-4;0]	0.07	0.7	-4	[-9;0]	0.04	0.8
	Mean ±SD	6.5	±2.9	-1.0	±3.4			-2.4	±3.3			-3.9	±4.9		
Site 2 - Doppler	Median [25p;75p]	5	[2;6]	-1	[-5;0]	0.12	0.6	0	[-2;0]	0.36	0.3	-4	[-5;-1]	0.06	0.7
	Mean ±SD	4.6	±2.9	-2.0	±3.4			-1.2	±3.7			-2.8	±3.8		
Site 3 - Grey scale (n=14)	Median [25p;75p]	3	[2;4]	-2	[-3;0]	<0.01	1.0	-0.5	[-1;1]	0.69	0.0	-2	[-2;-3]	0.01	0.7
	Mean ±SD	3.4	±2.6	-2.3	±2.4			-0.1	±2.4			-2.2	±3.2		
Site 3 - Doppler	Median [25p;75p]	3	[2;4]	-2	[-3;-1]	<0.01	0.9	0	[-1;0]	0.74	0.0	-2	[-4;-1]	0.01	0.8
	Mean ±SD	3.4	±2.6	-2.6	±3.0			-0.1	±2.3			-2.6	±3.4		
Site 4 - Grey scale (n=4)	Median [25p;75p]	3	[2;3.5]	-1.5	[-2.5;-0.5]	0.25	1.2	0	[-1.5;3]	0.75	0.2	-1.5	[-2.5;1]	0.75	0.3
	Mean ±SD	2.8	±1.6	-1.5	±1.3			-0.8	±3.8			-0.8	±2.6		
Site 4 - Doppler	Median [25p;75p]	1.5	[1;2]	-1	[-1.5;-0.5]	0.25	1.2	0	[-1;0.5]	1.0	0.2	-1	[-1;-1.5]	0.13	2.6
	Mean ±SD	1.5	±0.6	-1.0	±0.8			-0.3	±1.3			-1.3	±0.5		
Site 5 - Grey scale (n=10)	Median [25p;75p]	3	[2;7]	-2.0	[-3;-2]	<0.01	2.1	0	[-1;0]	0.5	0.3	-2	[-3;-2]	<0.01	1.3
	Mean ±SD	4.5	±3.4	-2.5	±1.2			-0.5	±1.6			-3.0	±2.3		
Site 5 - Doppler	Median [25p;75p]	3	[2;4]	-3	[-3;-1]	<0.01	1.2	0	[-1;-0]	<0.01	0.7	-3	[-3;-1.5]	<0.01	1.2
	Mean ±SD	4	±3.2	-3.3	±2.8			-0.6	±0.8			-3.9	±3.2		
Site 6 - Grey scale (n=6)	Median [25p;75p]	4.5	[3;6]	-1	[-2;-0]	0.13	1.1	-0.5	[-1;0]	0.5	0.5	-1.5	[-2;-1]	0.06	2.4
	Mean ±SD	4.3	±1.6	-1.0	±0.9			-0.5	±1.0			-2.0	±0.8		
Site 6 - Doppler	Median [25p;75p]	2.5	[2;3]	-1.5	[-2;-1]	0.06	1.4	0	[-2;0]	0.5	0.6	-2	[-3;1]	0.06	1.1
	Mean ±SD	2.7	±2.0	-1.5	±1.0			0.8	±1.3			-2.3	±2.1		
All sites - Grey scale (n=67)	Median [25p;75p]	4	[2;7]	-2	[-3;0]	<0.01	0.8	-1.0	[-2;0]	<0.01	0.4	-2	[-5;-5]	<0.01	0.9
	Mean ±SD	5.0	±3.4	-2.4	±2.9			-0.9	±2.4			-3.3	±3.8		
All sites - Doppler (n=67)	Median [25p;75p]	3	[2;6]	-2	[-4;-1]	<0.01	0.8	0	[-2;0]	<0.01	0.3	-3	[-5;-2]	<0.01	0.9
	Mean ±SD	4.5	±3.9	-3.1	±3.9			-0.7	±2.3			-3.8	±4.2		

P, *p*-value for Wilcoxon's test for change of paired data between 2 time points; *N*, number of patients; *SRM*, standardized response mean. Values in brackets are values at 25th and 75th percentiles

Supplementary Table 3. Change in DAS-28 and HAQ scores, and their standardized response mean, during 6 months follow-up, for each site and for all patients.

Site - Imaging modality		Baseline		Δ 0-3 month		P	SRM	Δ 3-6 month		P	SRM	Δ 0-6 month		P	SRM
Site 1 - DAS28 (n=22)	Median [25p;75p]	5.2	[4.5;6]	-1.7	[-2.6;0.6]	<0.01	0.7	-0.6	[-0.9;0.1]	<0.01	0.6	-2.2	[-3.6;-1]	<0.01	1.2
	Mean ±SD	4.9	±1.4	-1.5	±1.5			-0.6	±0.9			-2.1	±1.8		
Site 1 - HAQ	Median [25p;75p]	1.25	[0.875;1.75]	-0.625	[-1;-0.25]	<0.01	0.1	0	[0;0.25]	0.18	0.3	-0.625	[-1.125;-0.25]	<0.01	1.3
	Mean ±SD	1.2	±0.66	-0.8	±0.6			0	±0.2			-0.7	±0.6		
Site 2 - DAS28 (n=11)	Median [25p;75p]	4.7	[4.3;5.3]	-2.3	[-2.8;-0.2]	0.01	1.0	-1.2	[-2.45;-0.2]	0.03	0.8	-2.5	[-3.4;-2]	<0.01	2.3
	Mean ±SD	5	±1.4	-1.7	±1.6			-1.2	±1.6			-2.8	±1.2		
Site 2 - HAQ	Median [25p;75p]	1	[0.5;1.375]	-0.375	[-0.625;0.125]	0.03	0.7	-0.225	[-0.625;0]	0.04	0.8	-0.5	[-0.875;-0.25]	<0.01	1.4
	Mean ±SD	0.9	±0.6	-0.3	±0.4			-0.3	±0.4			-0.6	±0.4		
Site 3 - DAS28 (n=14)	Median [25p;75p]	4.2	[3.5;5]	-1.2	[-2.4;-0.3]	0.01	0.8	-0.4	[-1.3;1.3]	0.75	0.1	-1.5	[-2.7;-1.1]	<0.01	1
	Mean ±SD	-4	±1.2	-1.5	±1.8			-0.1	±2.1			-1.6	±1.6		
Site 3 - HAQ	Median [25p;75p]	1	[0.25;1.375]	-0.325	[-0.75;-0]	0.05	0.5	-0.125	[-0.625;0.125]	0.26	0.4	-0.575	[-1.125;0]	0.02	0.8
	Mean ±SD	0.8	±0.6	-0.3	±0.6			-0.2	±0.5			-0.5	±0.6		
Site 4 - DAS28 (n=4)	Median [25p;75p]	3.8	[3.6;4.0]	-1.3	[-2.9;-0.4]	0.13	1.0	0.8	[-0.5;2.3]	0.63	0.6	-0.9	[-1.4;0]	0.25	0.8
	Mean ±SD	3.8	±0.3	-1.7	±1.7			0.9	±1.6			-0.8	±1.0		
Site 4 - HAQ	Median [25p;75p]	0.5	[0.5;0.75]	-0.25	[-0.75;0]	0.50	0.8	0	[0;0.5]	1.00	0.5	0	[-0.25;0]	1	0.4
	Mean ±SD	0.6	±0.3	-0.4	±0.5			0.25	±0.5			-0.1	±0.3		
Site 5 - DAS28 (n=10)	Median [25p;75p]	3.8	[3.2;4.8]	-1.0	[-2.2;-0.1]	0.02	0.9	-0.3	[-0.6;0]	0.12	0.4	-0.8	[-3;-0.3]	<0.01	0.9
	Mean ±SD	3.8	±0.3	-1.1	±1.8			-0.6	±1.5			-1.7	±1.9		
Site 5 - HAQ	Median [25p;75p]	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Mean ±SD	*	*	*	*			*	*			*	*		
Site 6 - DAS28 (n=6)	Median [25p;75p]	3.6	[2.8;4.0]	0	[-0.14;0]	0.50	0.9	0	[0;0]	1.0	0.4	-0.1	[-0.3;0]	0.25	0.6
	Mean ±SD	3.6	±0.9	-0.1	±0.1			-0.2	±0.6			-0.3	±0.5		
Site 6 - HAQ	Median [25p;75p]	1.25	[0.875;1.5]	-0.312	[-0.5;0]	0.19	0.7	0	[0;0]	1.0	0.0	-0.375	[-0.5;-0.25]	0.09	1.0
	Mean ±SD	1.3	±0.6	-0.4	±0.5			0	±0.2			-0.4	±0.4		

Site all - DAS28 (n=67)	Median [25p;75p]	4.6	[3.7;5.3]	-1.4	[-48;-2]	<0.01	0.9	-0.4	[-1.3;0.1]	<0.01	0.3	-1.6	[-3.2;-0.7]	<0.01	1.1
	Mean ±SD	4.4	±1.3	-1.4	±1.5			-0.5	±1.5			-1.8	±1.7		
Site all - HAQ (n=67)	Median [25p;75p]	1.0	[0.5;1.5]	-0.25	[-0.75;0]	<0.01	0.8	0	[-0.25;0]	0.02	0.3	-0.375	[-0.875;0]	<0.01	0.9
	Mean ±SD	1.0	±0.6	-0.4	±0.4			-0.1	±0.3			-0.5	±0.5		

P, p-value for Wilcoxon's test for change of paired data between 2 time points; SRM, standardized response mean; N, number of patients; DAS28, Disease Activity Score for 28 joints, using CRP, C-reactive protein; HAQ, health assessment questionnaire; *, no available HAQ score. Values in brackets are values at 25th and 75th percentiles

Supplementary Table 4. Change in CRP, VAS-patient TS and VAS Global scores, and their standardized response mean, during 6 months follow-up, for each site and for all patients.

Site - Imaging modality		Baseline		Δ 0-3 month		P	SRM	Δ 3-6 month		P	SRM	Δ 0-6 month		P	SRM
Site 1 - CRP (n=22)	Median [25p;75p]	14.5	[8;34]	-8.5	[-29;-1]	<0.01	0.7	-0.5	[-5;-0]	0.08	0.4	-9.5	[-32;-3]	<0.01	0.7
	Mean ±SD	31.1	±38.4	-22.6	±34			4	±11.3			-26.6	±39.4		
Site 1 - VAS-patient TS	Median [25p;75p]	61.5	[46;78]	-44	[-62;-24]	<0.01	1.6	-3	[-13;3]	0.16	0.3	-43	[-69;-32]	<0.01	1.8
	Mean ±SD	62.9	±18.5	-42.8	±26.4			-5.6	±19.7			-48.4	±27.1		
Site 1 - VAS Global	Median [25p;75p]	68	[56;81]	32	[-54;-10]	<0.01	1.2	-0.5	[-13;8]	0.74	0.2	-40	[-1;0]	<0.01	1.3
	Mean ±SD	65.0	±21.6	32	±26.4			-4.9	±24.7			-36.9	±27.8		
Site 2 - CRP (n=11)	Median [25p;75p]	10	[1;50]	-9	[-10;0]	0.13	0.4	0	[-9;0]	0.13	0.6	-9	[-19;0]	0.09	0.5
	Mean ±SD	22.9	±32.1	-13.3	±31.7			-4.3	±6.6			-17.5	±36.1		
Site 2 - VAS-patient TS	Median [25p;75p]	56	[50;80]	-20	[-40;-2]	<0.01	1.2	-10	[-40;0]	<0.01	1.1	-40	[-60;-30]	<0.01	2.4
	Mean ±SD	65.1	±17.1	-24.2	±20.7			-21.8	±20.4			-46	±19.4		
Site 2 - VAS Global	Median [25p;75p]	65	[50;80]	-20	[-7;-1]	<0.01	1.5	-30	[-3;-3]	0.14	0.5	-55	[-1;0]	<0.01	1.8
	Mean ±SD	64.7	±18.2	-24.4	±16.4			-18.1	±35.2			-42.5	±30.2		
Site 3 - CRP (n=14)	Median [25p;75p]	10	[5;20]	-5.5	[-18;0]	0.06	0.5	-1.5	[-2;4]	0.58	0.0	-4.5	[-20;-3]	0.09	0.3
	Mean ±SD	16.8	±16.1	-9.3	±18.7			0.6	±21.5			-8.6	±25.3		
Site 3 - VAS-patient TS	Median [25p;75p]	31.5	[10;60]	-23	[-50;0]	0.02	0.7	-2.5	[-15;20]	0.94	0.0	-20	[-55;0]	0.02	0.6
	Mean ±SD	33.8	±27.5	-22.8	±31.5			-0.3	±26.6			-23.1	±35.7		
Site 3 - VAS Global	Median [25p;75p]	50	[20;60]	-25	[-50;-10]	<0.01	0.9	-2.5	[-10; 25]	0.85	0.1	-20	[-41;-10]	0.01	0.8
	Mean ±SD	42.7	±22.2	-24.7	±26.4			1.9	±31.6			-22.8	±28.5		
Site 4 - CRP (n=4)	Median [25p;75p]	22.5	[15;46]	-18	[-39;-10]	0.13	1.1	3	[-3.5;8]	0.63	0.3	-19.5	[-42.5;-2]	0.25	0.8
	Mean ±SD	30.5	±22.2	-24.5	±22.6			2.3	±8.0			-22.3	±26.7		
Site 4 - VAS-patient TS	Median [25p;75p]	40	[35;45]	-25	[-40;-5]	0.25	1.1	-5	[-15;30]	1.00	0.2	-40	[-30;0]	0.50	0.6
	Mean ±SD	40.0	±8.2	-22.5	±20.6			-7.5	±35.9			-15	±25.2		

Site 4 - VAS Global	Median [25p;75p]	45	[36; 50]	-21	[-36;-15]	0.13	1.5	10	[0;20]	0.50	0.9	-16	[-26;-5]	0.25	1.2
	Mean ±SD	43.0	±8.7	-25.5	±17.1			10	±11.5			-15.5	±13.2		
Site 5 - CRP (n=10)	Median [25p;75p]	10.0	[8.0;15.0]	-5.5	[-11;-2.0]	<0.01	1.1	-1.5	[-4;0]	0.17	0.5	-6	[-11;-3]	<0.01	1.0
	Mean ±SD	13.1	±7.0	-7.0	±6.6			-1.5	±3.0			-8.1	±8.3		
Site 5 - VAS-patient TS	Median [25p;75p]	45	[50;70]	-32	[-37;-10]	<0.01	1.4	0	[13;0]	0.31	0.4	-45	[-65;-10]	<0.01	1.4
	Mean ±SD	43.0	±8.7	-32.4	±23.7			-8.4	±18.9			-40.8	±28.8		
Site 5 - VAS Global	Median [25p;75p]	68	[50;70]	-52.5	[-75;-40]	<0.01	2.1	0	[-10;10]	0.72	0.1	-52.5	[-70;-48]	<0.01	2.1
	Mean ±SD	65.3	±13.0	-52.5	±25.1			1.2	±10.9			-51.3	±24.0		
Site6 - CRP (n=6)	Median [25p;75p]	4	[3;5]	-1	[-1;0]	0.31	0.7	-1	[-1;0]	0.13	1.4	-4.5	[-2;-1]	<0.01	1.6
	Mean ±SD	4.2	±1.2	-0.7	±1.0			-0.7	±0.5			-1.3	±29.9		
Site 6 - VAS-patient TS	Median [25p;75p]	30	[20;35]	-7.5	[-10;0]	0.56	0.1	-10	[-10;0]	0.31	0.6	10	[-15;-5]	0.06	1.4
	Mean ±SD	29.2	±13.6	-1.7	±13.7			-8.3	±13.3			10	±7.1		
Site 6 - VAS Global	Median [25p;75p]	37.5	[30;40]	-10	[-10;-5]	0.06	1.8	-10	[-10;10]	1.0	0.1	-12.5	[-20;0]	0.19	0.8
	Mean ±SD	37.5	±7.6	-7.5	±4.2			-1.7	±13.3			-9.2	±12		
Site all - CRP (n=67)	Median [25p;75p]	13	[6;26]	-6	[-19;0]	<0.01	0.5	0	[-4;0]	<0.01	0.2	-7	[-23;-2]	<0.01	0.5
	Mean ±SD	22.5	±28.3	-14.1	±25.2			-2.0	±12.1			-16.1	±30.7		
Site all - VAS-patient TS (n=67)	Median [25p;75p]	50	[40;70]	-31	[-48;-10]	<0.01	1.1	-5	[-15;0]	<0.01	0.3	-40	[-60;-17]	<0.01	1.2
	Mean ±SD	52.4	±23.7	-29.1	±27.2			-7.0	±22.5			-36.1	±29.7		
Site all - VAS Global (n=67)	Median [25p;75p]	58.5	[40;74]	-29	[-50;-10]	<0.01	1.2	0	[-13;15]	0.44	0.1	-36	[-55;-10]	<0.01	1.2
	Mean ±SD	56.4	±21.5	-29.7	±25.2			-3.6	±25.9			-33.3	±28.4		

P, *p*-value for Wilcoxon's test for changes of paired data between 2 time points; *N*, number of patients; *SRM*, standardized response mean; *CRP*, C-reactive protein; *VAS-patient TS*, patient-reported visual analog scale (VAS) tenosynovitis pain score; *VAS Global*, patient global visual analogue scale. Values in brackets are values at 25th and 75th percentiles